

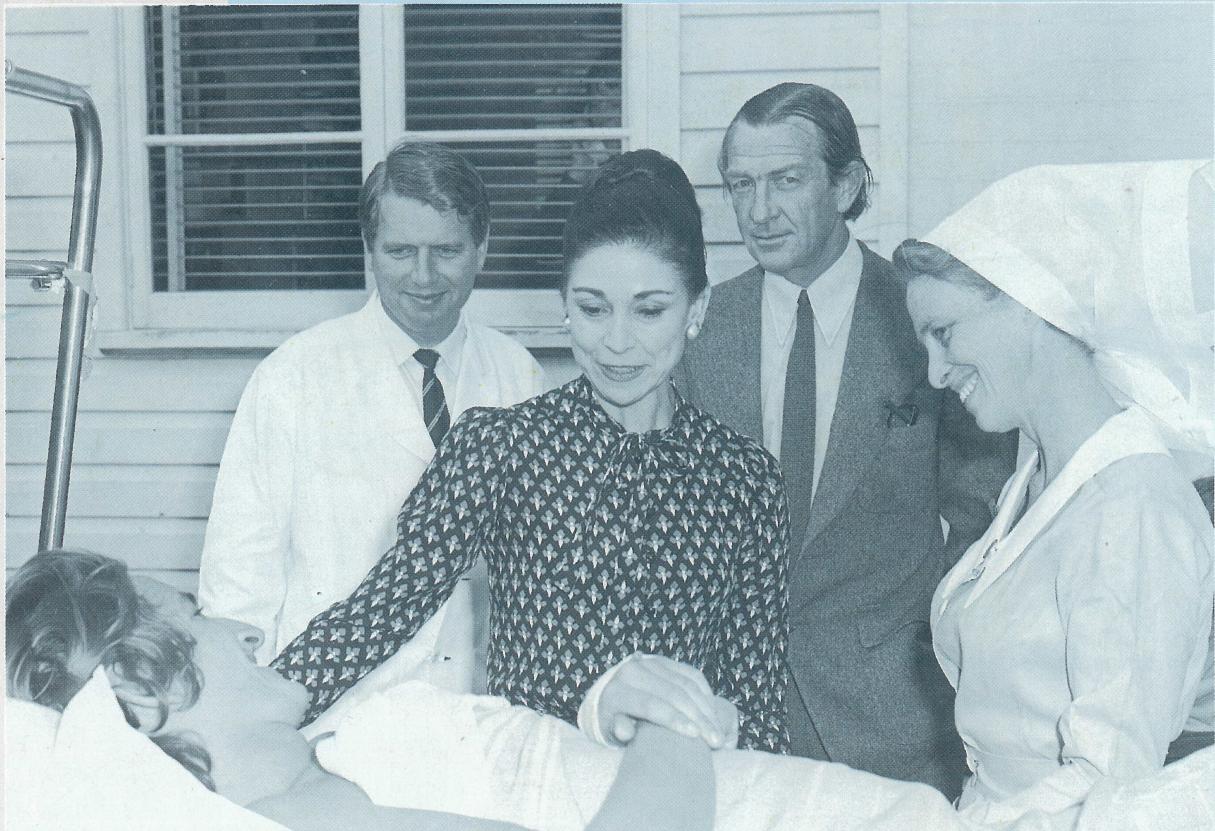
RNS

**ROYAL NORTH
SHORE HOSPITAL
SYDNEY**

**20 YEARS OF
RESEARCH IN
SPINAL INJURIES
TO 1987**

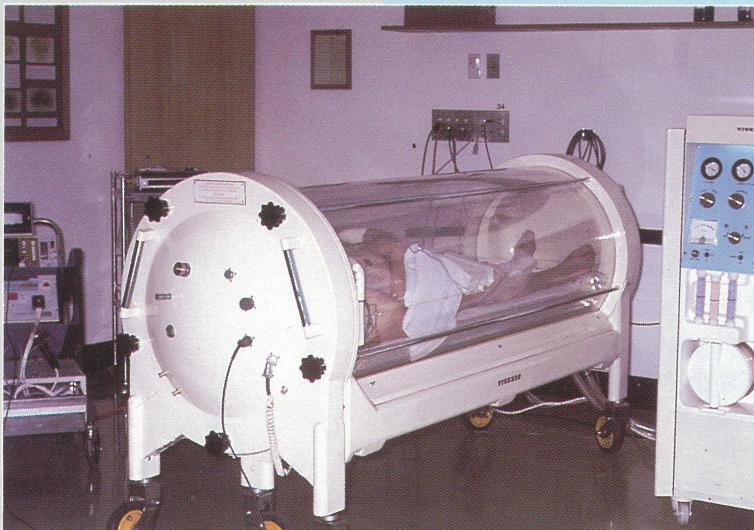
The Spinal Injuries and Rehabilitation Clinic has been at the Royal North Shore Hospital for over 30 years. Dr. J. M.F. Grant, O.B.E., Senior Neuro-surgeon developed the Unit in those early years and gathered around him a team of dedicated nurses, physiotherapists, occupational therapists, social workers, splint makers and many voluntary helpers. Specialised surgery and nursing care was followed by medical, social and vocational rehabilitation. Dr. John Yeo, A.O., was appointed Medical Director to the Spinal Injuries Unit in 1968. During these last 20 years improvements have been achieved in medical and nursing care with development of special equipment for assisting the paralysed in the rehabilitation programmes. Specialised professionals have also joined the team, such as the Biomedical Engineer, Surgical Dressers trained for special duties and highly skilled nursing staff with expertise in intensive care and assisting patients and relatives in the challenging adjustment to permanent disability. Over 1800 patients have now received treatment through this Unit.

During the last 20 years basic and applied research has continued in an effort to improve the degree of recovery from paralysis following serious injury to the spinal cord. Research has improved appliances and wheelchairs to allow better function and mobility for those suffering from paraplegia or quadriplegia. In recent years the 'microchip' has vastly improved the potential for those with serious handicaps. The community has become more aware of the needs of those with disability, improving access to public buildings and homes, providing accommodation, the opportunity for schooling and further education.



Dame Margot Fonteyn visits the old Spinal Unit in 1971 with Dr. J. M. F. Grant, Sr. N. Joyce, and Dr. J. D. Yeo.

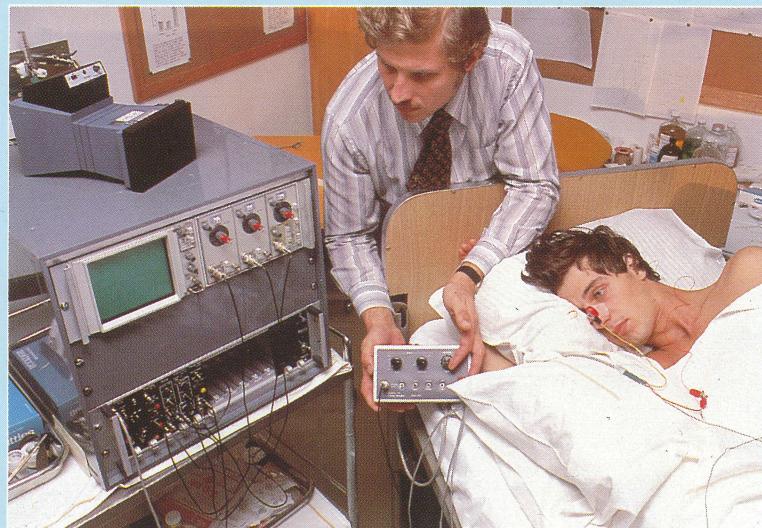
SPINAL



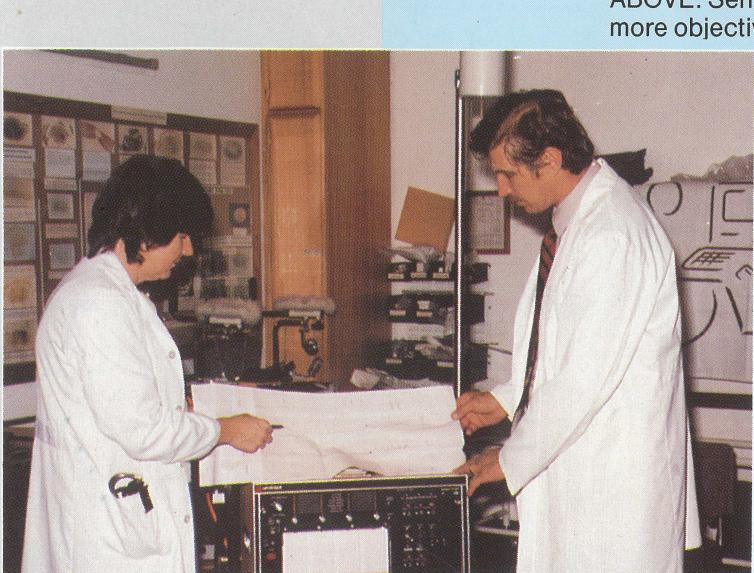
LEFT: The Hyperbaric Oxygen Chamber, capable of increasing the pressure to 2.5 ATA resulting in increased oxygenation to the injured spinal cord.



LEFT: Peter demonstrates his ability to stand, though paralysed, with the assistance of programmed Electrical Stimulation to the muscles of the thighs.



ABOVE: Sensory Evoked Potentials are being used to help obtain a more objective diagnosis on the state of injury to the spinal cord in the acute phase.



LEFT: Dr. Sue Rutkowski, Staff Specialist in the Spinal Unit with Mr. Robert Bosshard, Biomedical Engineer discussing the result of Urodynamic studies in the Research Laboratory.

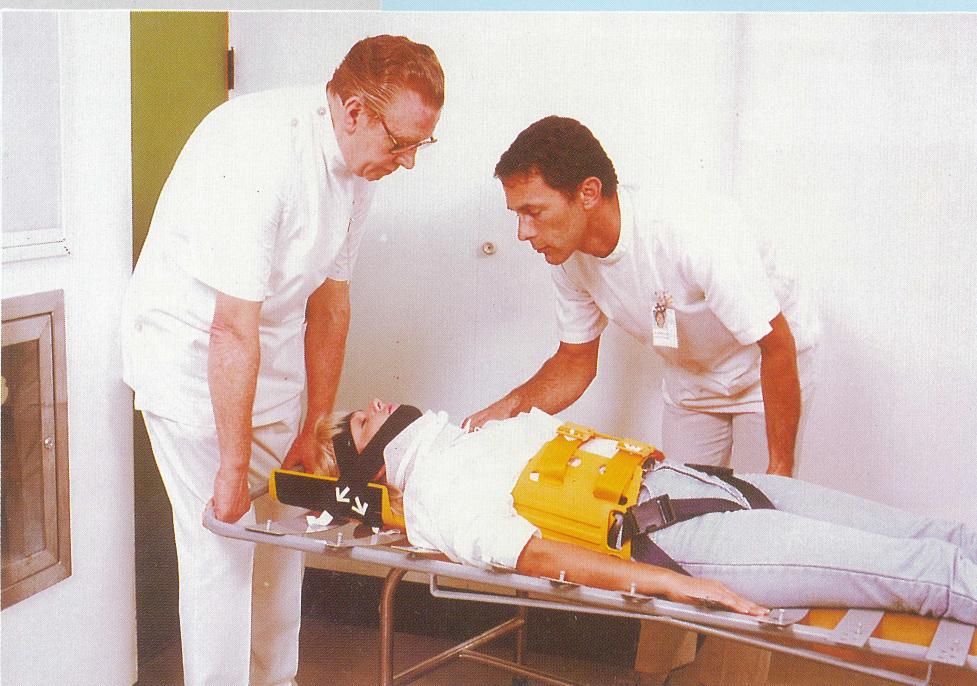
RESEARCH



LEFT: The revolutionary plastic lightweight wheelchair for use in this country and in the South Pacific Islands.



ABOVE: A patient learns to communicate with the assistance from the Apple Macintosh Computer, using chin controls and a specially designed desk.



LEFT: The Russell Extrication Device, developed to enable the seriously injured motor vehicle accident victim to be transferred without further damage to the spinal cord.

Mr. Robert Bosshard and Dr. John Yeo have travelled to many Spinal and Research Centres overseas including China, Russia, the U.S.A., Canada, the United Kingdom, Europe, South East Asia, Israel and India. The Unit continues to communicate with these centres and share in the results of research being carried out here and overseas.

AWAWARENESS AND PREVENTION

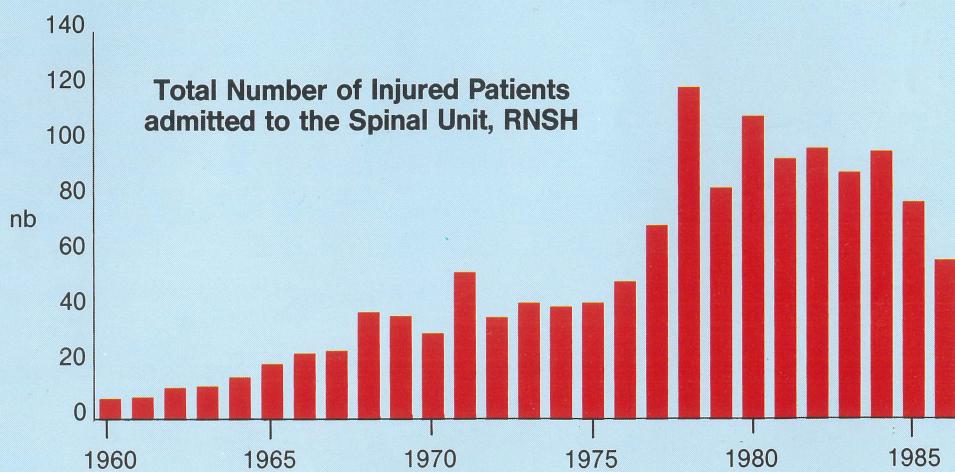


LEFT: Mr. Errol Hyde and Mr. Fabian Blattman with a class of enthusiastic youngsters, keen to learn what the spinal column looks like, and how delicate the spinal cord really is.



LEFT: Over the last five years the Awareness and Prevention Team have reached over 200,000 school children. The Team is co-ordinated with five lecturers in wheelchairs presenting advice on how to enjoy life while avoiding some of the serious dangers which could lead to spinal cord injury. The community has become more aware of these dangers and the incidence of spinal cord injury in our community is now falling.

BELOW: Up until recently we could expect 150 patients admitted with serious spinal injuries each year. 150 families would be faced with this serious challenge. Hopefully the incidence of spinal cord injury will continue to fall through the impact of the Awareness and Prevention Lecture Team.



SPINAL INJURIES RESEARCH TEAM



LEFT: John D. Yeo, A.O., M.B., M.S., D.P.R.M., F.R.A.C.S., F.A.C.R.M., Medical Director

John D. Yeo, A.O., M.B., M.S., D.P.R.M., F.R.A.C.S., F.A.C.R.M.,
Medical Director

Sue Rutkowski, M.B., B.S., Staff Specialist.

Robert Bosshard, D.Eng., (E.P.F.) M.Sc., I.B.M.E., I.E.E.E.

Margaret Davis, Secretary.

RESEARCH ASSISTANTS: Con Poulos, M.B.,
B.S., Sr. Angela Adams, Sr. Anne Fuller, Ray
Sherwood, Ray Kearns, Sue Ambuhl, B.Sc.,
Stephanie Stabback B.Sc.

AWARENESS & PREVENTION TEAM

Lyn Ryan, B.A., Dip. Teach. Co-ordinator.

LECTURERS: Errol Hyde (Leader), Fabian
Blattman, Jeffrey St. John, Richard
Cordukes, Robert Staddon.

VOLUNTARY WORKERS

Vivienne Inder, Donal McGrane.

CONSULTANTS

Drs. John M. F. Grant, Douglas Keller,
Christopher Lowry, Stephen Hunyor, William
Payne, Jean McPhail, Anthony D. Kidman, J.
R. S. Hales.

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Over these last 20 years your help and encouragement have enabled clinical and research teams to improve treatment techniques, assist the patient to overcome disability, demonstrating improved ability and lessening the impact of this devastating injury to individuals, their families and the community.

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